

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

RESOLUTION NO. R9-2010-0066

(Underline/Strikeout version)

**APPROVAL OF THE HYDROMODIFICATION MANAGEMENT PLAN FOR THE
COUNTY OF SAN DIEGO, THE INCORPORATED CITIES OF SAN DIEGO
COUNTY, THE SAN DIEGO UNIFIED PORT DISTRICT, AND THE SAN DIEGO
COUNTY REGIONAL AIRPORT AUTHORITY**

The California Regional Water Quality Control Board, San Diego Region
(hereinafter San Diego Water Board) finds that:

1. San Diego Water Board Order No. R9-2007-0001 (National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758), *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority*, was adopted on January 24, 2007, and prescribes requirements for the control of pollutant discharges from MS4s within San Diego County.
2. Provisions D.1.g and J.2.a of Order No. R9-2007-0001 require the County of San Diego, the incorporated cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (Copermittees) to submit a Hydromodification Management Plan (HMP) to manage increases in runoff discharge rates and durations from all Priority Development Projects (PDPs), where such increased rates and durations are likely to cause increased erosion of channel bed and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.
3. Provision J.2.a of Order No. R9-2007-0001 requires the Copermittees to submit a Draft HMP within 2 years of adoption of the Order and a Final HMP for San Diego Water Board approval within 180 days of receiving comments from the San Diego Water Board on the Draft HMP. Provision D.1.g.(5) of Order No. R9-2007-0001 states that 180 days after approval of the HMP by the San Diego Water Board, each Copermittee shall incorporate the HMP into its local Standard Urban Storm Water Mitigation Plan (SUSMP) and ensure implementation for all applicable PDPs.
4. Pursuant to Provision J.2.a. of Order No. R9-2007-0001, by letter dated January 21, 2009, the County of San Diego submitted a Draft HMP on behalf of the Copermittees to the San Diego Water Board for review and comment. By letter dated June 29, 2009, the San Diego Water Board provided written comments on the Draft HMP to the Copermittees. By letter dated

December 29, 2009, the County of San Diego submitted a Final HMP on behalf of the Copermittees to the San Diego Water Board.

5. On January 14, 2010, the San Diego Water Board posted the Final HMP on the San Diego Water Board's website and initiated a 30-day public review and comment period. The San Diego Water Board received 3 comment letters on the Final HMP, and has considered these comments in identifying necessary revisions to the Final HMP as set forth in this Resolution.
6. The San Diego Water Board reviewed the Final HMP for compliance with Provision D.1.g of Order No. R9-2007-0001. Conclusions from this review are presented in Findings ~~a-f~~a-e below.

~~a. Section 6 of the Final HMP describes cases where exemptions from hydromodification mitigation requirements may be granted for PDPs. One such exemption is for urban infill projects discharging runoff to an existing hardened or rehabilitated conveyance system. According to the Final HMP, exemptions may be granted where the existing impervious area percentage in the watershed exceeds 40 percent, and if the potential future development in the watershed would increase the watershed's impervious area percentage by less than 3 percent (as compared to existing conditions). The potential for future development in each watershed is speculative and highly variable and there is no guarantee that such impacts would result in an increase in impervious surface limited to less than 3 percent. Therefore, this exemption is not appropriate.~~

~~b.~~a. Section 6 of the Final HMP includes a decision matrix to guide users in choosing or sizing appropriate hydromodification mitigation facilities. The decision matrix and accompanying text states that a maximum drawdown time of 72-hours is allowed, which corresponds to standards set forth by the County Department of Environmental Health (DEH) for vector control. As DEH standards are subject to change, it is more appropriate to state generic drawdown requirements in meeting this design specification.

~~c.~~b. The Final HMP does not include development of a Quality Assurance Project Plan (QAPP) for water quality monitoring or geomorphic assessment described in the HMP Monitoring Plan. A QAPP is necessary to ensure consistency and data reliability.

~~d.~~c. Various assumptions were made in calculations of critical flows (flows which initiate sediment movement and cause erosion). Assumptions included designating typical configurations to local channels since data describing such configurations is sparse. Local geomorphic data is needed to validate or refine these assumptions to improve the accuracy of calculated critical flows, and refine design standards and other HMP

requirements as necessary. PDPs, if conditioned to do so, can provide such data as part of the land development permitting process. To include data for undeveloped areas, the Copermittees must supplement the local data where no PDPs are planned.

e.d. Section 8 of the Final HMP describes monitoring and best management practice (BMP) evaluation, including flow based sediment monitoring. Section 8 proposes a minimum of 5 monitoring points throughout San Diego County over a period of 2 rainy seasons. This proposed monitoring is inadequate for purposes of assessing effectiveness of HMP implementation, as required by provision D.1.g(1)(k) of Order No. R9-2007-0001. Substantially more data are needed to better quantify flow based sediment concentrations associated with the typical range of channel dimensions and materials, contributing watershed sizes, land uses, vegetative cover, and rainfall patterns (and subsequent flow) in receiving waters throughout San Diego County. In addition to increased spatial coverage, monitoring is needed over several rainy seasons for increased temporal coverage because Copermittees will need to distinguish erosion caused by anthropogenic activities from naturally occurring erosion in order to assess the effectiveness of the HMP.

e. Section 8 of the Final HMP states that the details of the HMP Monitoring Plan for San Diego County will continue to evolve and be improved over time, and that this improvement process will be based in part on the analysis of collected data. The Final HMP states that, as more data are collected and as field issues associated with the data collection are refined, the HMP Monitoring Plan can be fine-tuned to most accurately assess the effects of the hydromodification flow control facilities. However, the Final HMP does not contain a commitment with a specific timeframe to verify and/or refine the assumptions, findings, and requirements of the HMP in light of newly gathered data. Neglecting to include such a commitment gives no assurance that the assumptions, findings, and requirements of the HMP will ever be revisited.

7. Modifications to the Final HMP are necessary to address the deficiencies identified in Findings ~~a-f~~a-e, and to satisfy the requirements of Order No. R9-2007-0001.

8. Tentative Resolution No. R9-2010-0066 was provided to the Copermittees and made available to interested persons and the public on April 7, 2010 for review and comment. Tentative Resolution No. R9-2010-0066 was made available for a second round of comments on July 2, 2010. The San Diego Water Board received written comments and heard all comments concerning the Tentative Resolution at its meeting on July 14, 2010. Comments were responded to in writing or responded to orally at the Board meeting.

9. Implementation of an approved HMP is required by Order No. R9-2007-0001, an NPDES permit previously adopted by the San Diego Water Board. Approval of the HMP, as modified by this Resolution, is also exempt from the requirements of the California Environmental Quality Act pursuant to California Water Code section 13389.
10. Rainwater harvesting is the collection of storm water for future beneficial reuse. Rainwater harvesting is a highly effective BMP and should be used to the maximum extent practicable to meet the HMP requirements.

THEREFORE BE IT RESOLVED THAT

The San Diego Water Board hereby approves the Final HMP dated December 29, 2009 with the following revisions:

~~1. Section 6, Figure 6-1 –HMP Applicability Determination. Remove nodes 10-13 regarding program exemptions for urban infill projects, and all accompanying discussion.~~

2.1. Section 6, Figure 6-2 –Mitigation Criteria and Implementation, and Figure 6-3 –Mitigation Criteria and Implementation. Change nodes 5 and 17 from “Verify 72 hour Drawdown Time” to “Verify Necessary Drawdown Time,” and revise all accompanying discussion as needed.

3.2. Section 8, Monitoring and BMP Evaluation. Replace Section 8 of HMP with revised Section 8 dated July 14, 2010. In addition to the proposed monitoring stations, add 2 monitoring stations (1 highly susceptible and 1 medium susceptible) on downstream locations where development with less than 40 percent impervious area in the subwatershed has occurred.

4.3. As required by Order No. R9-2007-0001, each Copermittee shall incorporate the approved HMP into its local SUSMP and implement the HMP for all applicable PDPs by January 14, 2011. Failure to do so will result in non-compliance with Order No. R9-2007-0001.

I, David W. Gibson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, San Diego Region, on July 14, 2010.

DAVID W. GIBSON
Executive Officer